

## HIGH FREQUENCY PULSE WIDTH MODULATION

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### ABSTRACT

An electronic device is provided that achieves a reduction in the amount of unwanted noise produced as a consequence of electrical switching associated with pulse width modulation. The electrical device includes pulse width modulation controls for providing a plurality of settings for operation of the device. The electrical device includes a system for selectively controlling the frequency of the pulse width modulation to provide a desired output operational intensity in response to a known input signal. The system includes a high frequency pulse width modulation signal module adapted to provide frequencies above the audible range of anticipated users of the device, thereby reducing or eliminating the production of unwanted noise associated with the operation of such an electrical device.